UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 4

The School of Medicine

DEPARTMENT OF MICROBIOLOGY

October 30, 1952.

Dr. Joshua Lederberg
Department of Genetics
University of Wisconsin
Madison, Wisconsin

Dear Lederberg:

I have delayed answering your inquiry concerning lysogenicity in E. coli B because I kept hoping that each day I would have something more definite to tell you. We have isolated, on several occasions, phage from plaques obtained by plating E. coli B on K-12 or W-1485. Unfortunately, these occur in very low frequencies with poor reproducibility. We are quite convinced that E. coli B, or perhaps mutants of B, can form plaques on K-12. However, the ability to show this has been quite sporadic and elusive. We hope to eventually determine the optimum conditions, one of which at present appears to be a regime of starvation. We also are ever aware of the technical possibilities of a contamination with a lysogenic strain. As soon as we can reproduce this at will I shall let you know.

We too have found that the W strain is lysogenic producing several types of phage, one of which plates on K-12 but not on a wild type which we obtained from clinical sources (WM-13); the other plates on WM-13 but not on K-12.

Bob Guthrie tells me that he obtained one of your purine requiring strains from Bernie Davis which grows in guanine but not adenine. This is not a usual occurrence. I am particularly interested in the purines and pyrimidines and would greatly appreciate any of your mutants which show requirements for these substances.

Sincerely,

Joseph S. Gots

JSG:jlh